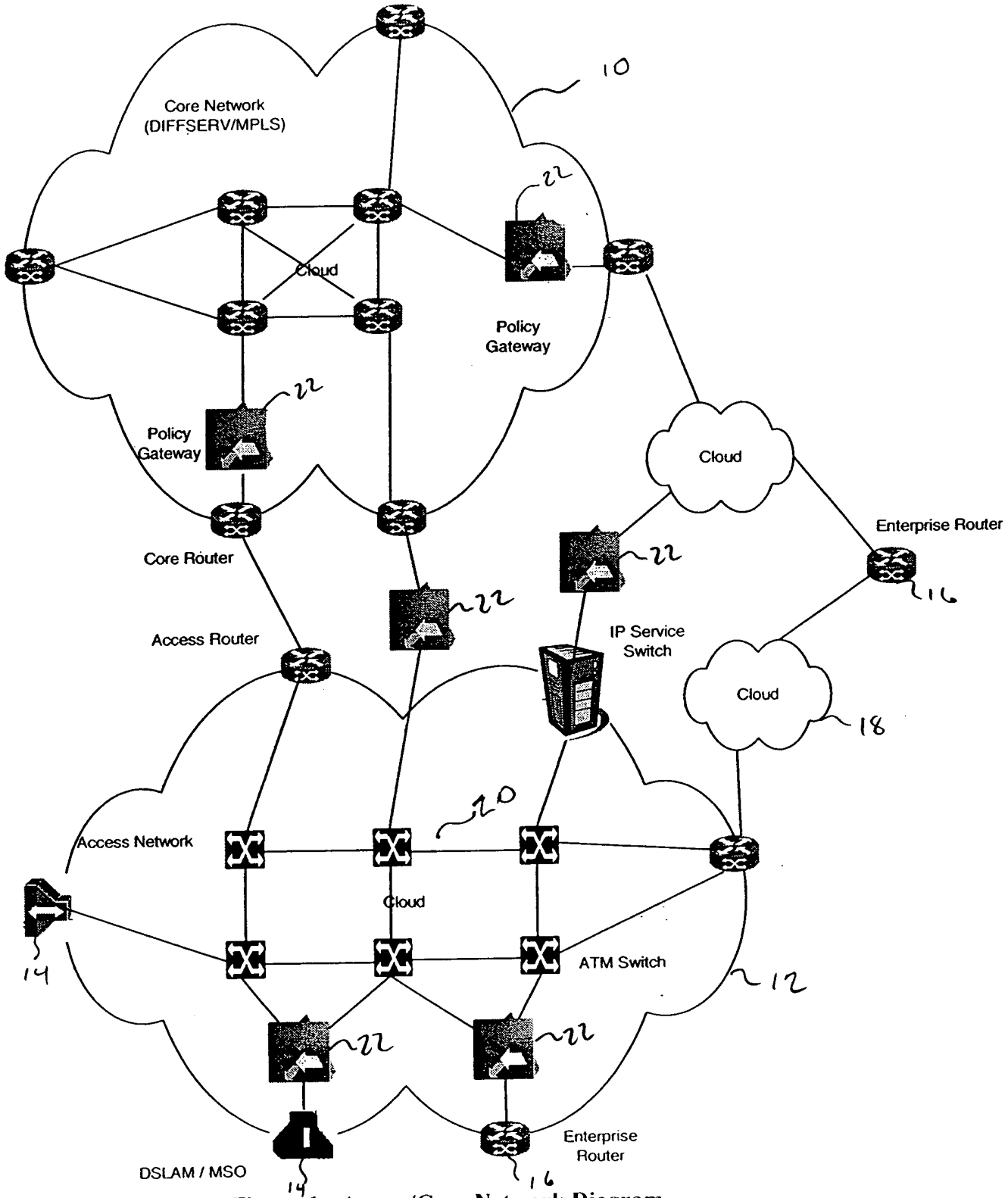

Figure 1: Access/Core Network Diagram

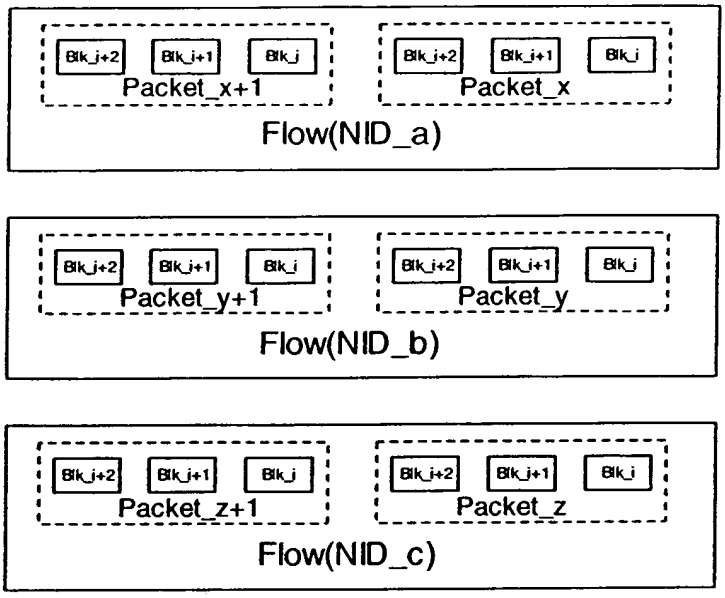
Blk_j+2
Blk_j+1
Blk_j
Packet_x+1
Packet_x
Flow(NID_a)
Packet_y+1
Packet_y
Flow(NID_b)
Packet_z+1
Packet_z
Flow(NID_c)

FIG. 2

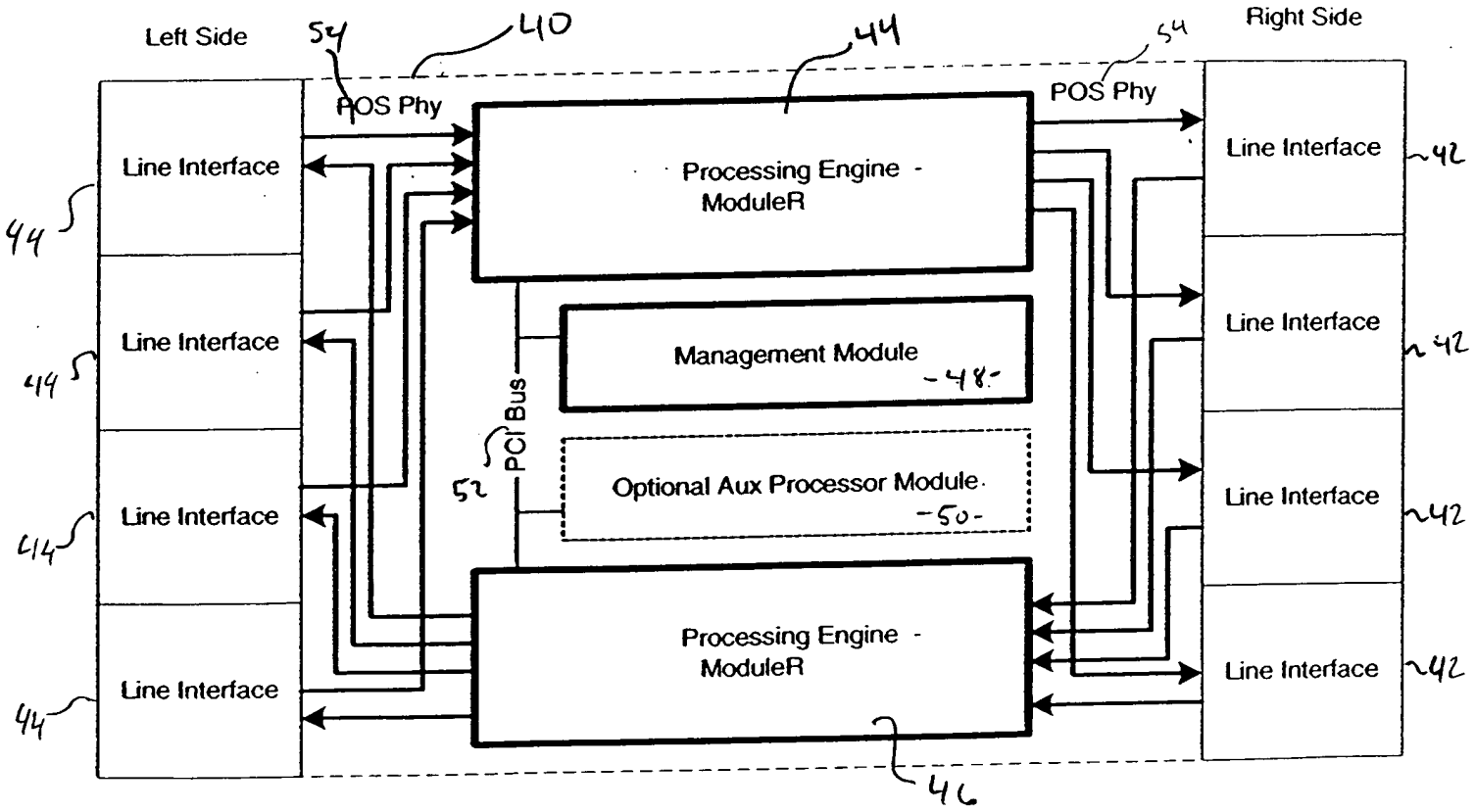
Left Side
Right Side
54
40
44
54
POS Phy
POS Phy
Line Interface
Line Interface
Line Interface
Line Interface
Line Interface
Line Interface
Line Interface
Line Interface
Processing Engine - ModuleR
Management Module
48
PCI Bus
52
Optional Aux Processor Module
50
Processing Engine - ModuleR
46
42

FIG. 3

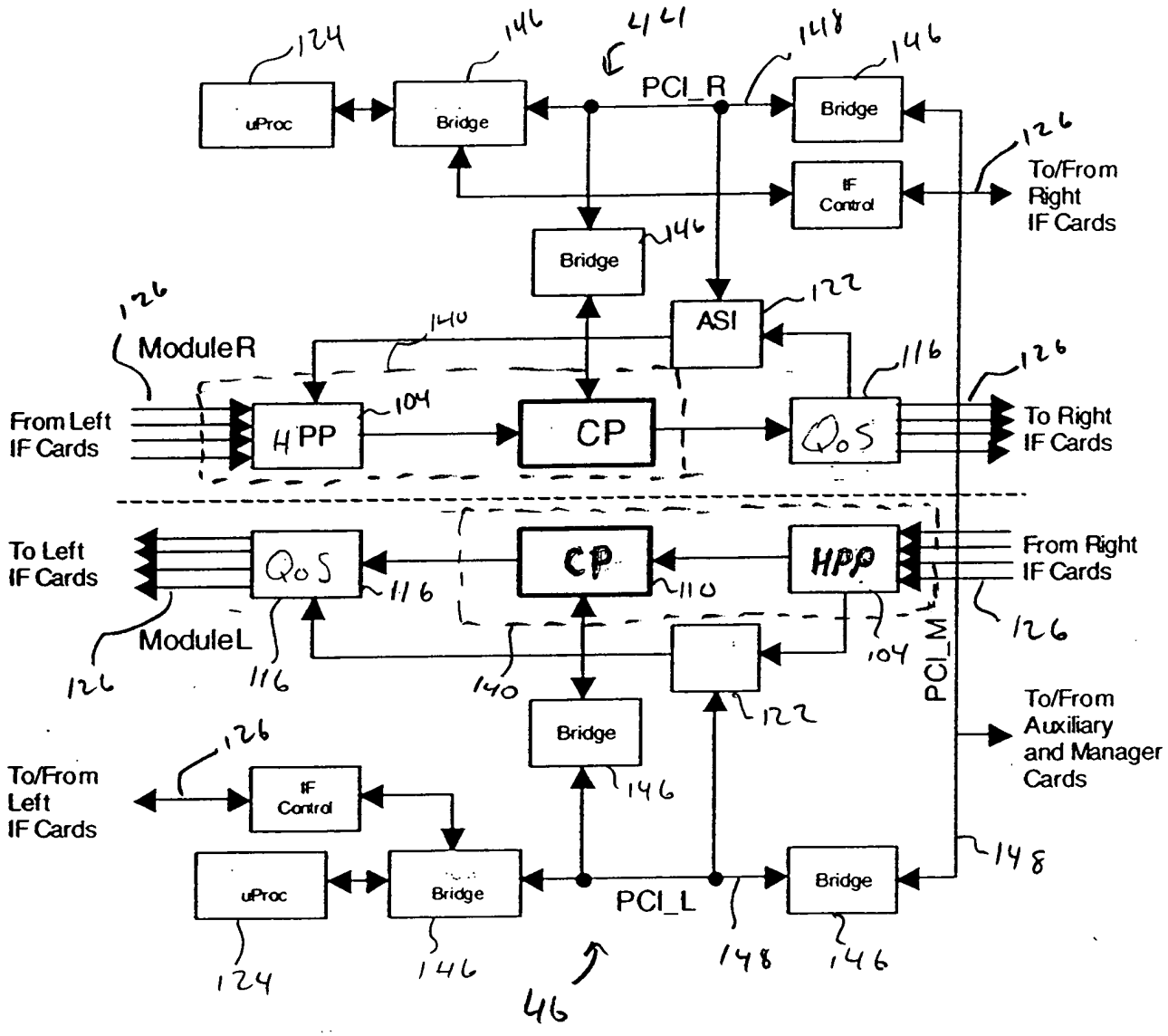
uProc
Bridge
PCI_R
Bridge
IF Control
To/From Right IF Cards
Bridge
ASI
ModuleR
From Left IF Cards
HPP
CP
QoS
To Right IF Cards
To Left IF Cards
QoS
CP
HPP
From Right IF Cards
ModuleL
PCI_M
Bridge
To/From Auxiliary and Manager Cards
To/From Left IF Cards
IF Control
uProc
Bridge
PCI_L
Bridge

FIG. 4

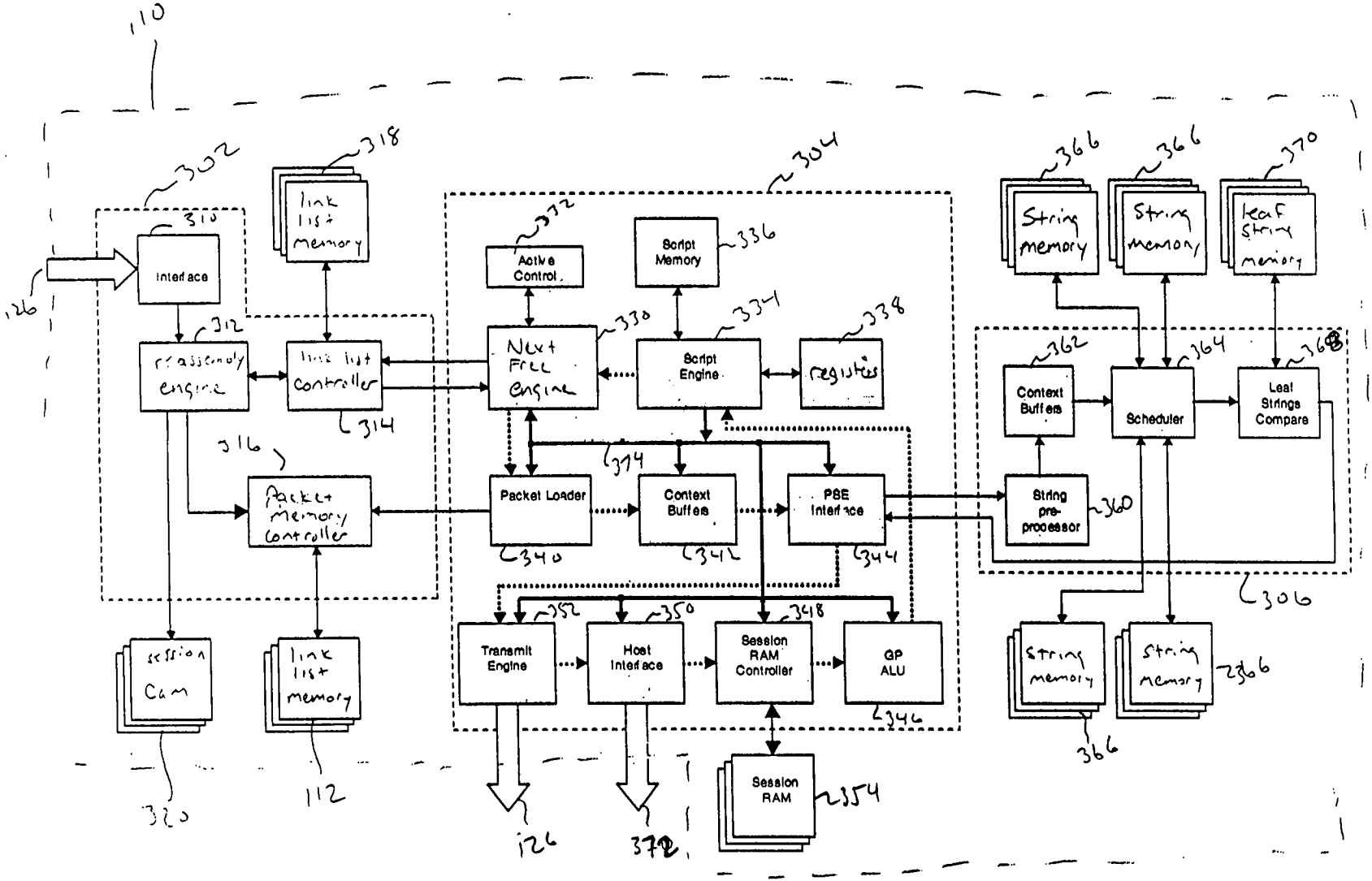
110
126
302
310
Interface
318
link list memory
312
reassembly engine
link list controller
314
316
packet memory controller
session CAM
320
link list memory
112
304
372
Active Control
Script Memory
336
330
Next Free engine
334
Script Engine
338
registers
374
Packet Loader
340
Context Buffers
342
PSE Interface
344
352
350
348
Transmit Engine
Host Interface
Session RAM Controller
GP ALU
346
126
372
Session RAM
354
366
366
370
String memory
String memory
leaf string memory
362
364
368
Context Buffers
Scheduler
Leaf Strings Compare
String pre-processor
360
306
String memory
String memory
366

FIG. 5

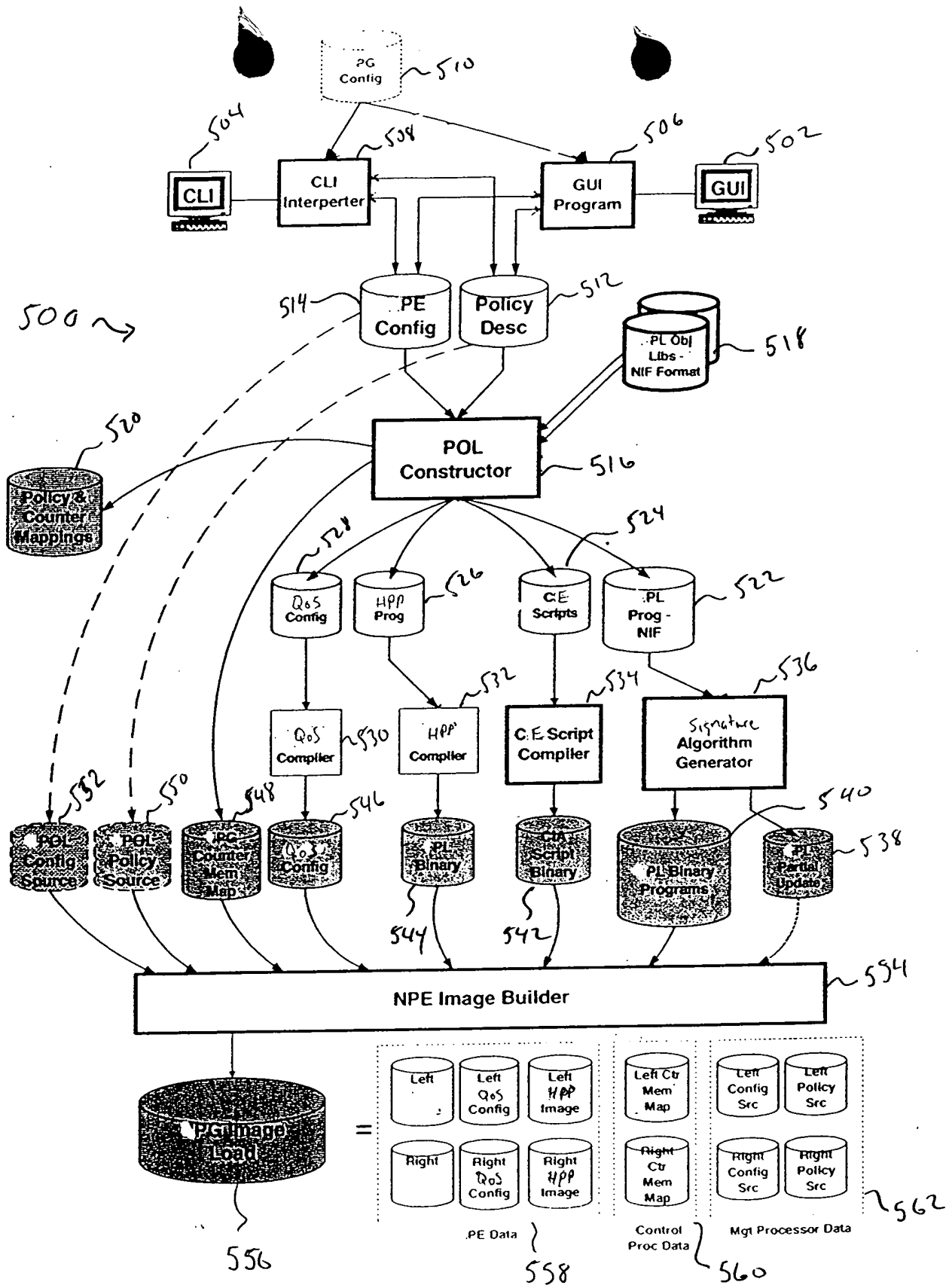
PG Config
510
504
508
506
502
CLI
CLI Interperter
GUI Program
GUI
500
514
PE Config
Policy Desc
512
PL Obj Libs - NIF Format
518
520
POL Constructor
516
Policy & Counter Mappings
524
524
QoS Config
HPP Prog
526
CE Scripts
PL Prog - NIF
522
532
534
536
QoS Compiler
530
HPP Compiler
C.E Script Compiler
Signature Algorithm Generator
552
550
548
546
540
538
POL Config Source
POL Policy Source
PG Counter Mem Map
QoS Config
PL Binary
CE Script Binary
PL Binary Programs
PL Partial Update
544
542
NPE Image Builder
554
PG Image Load
=
Left
Left QoS Config
Left HPP Image
Left Ctr Mem Map
Left Config Src
Left Policy Src
Right
Right QoS Config
Right HPP Image
Right Ctr Mem Map
Right Config Src
Right Policy Src
562
PE Data
Control Proc Data
Mgt Processor Data
556
558
560

FIG. 6

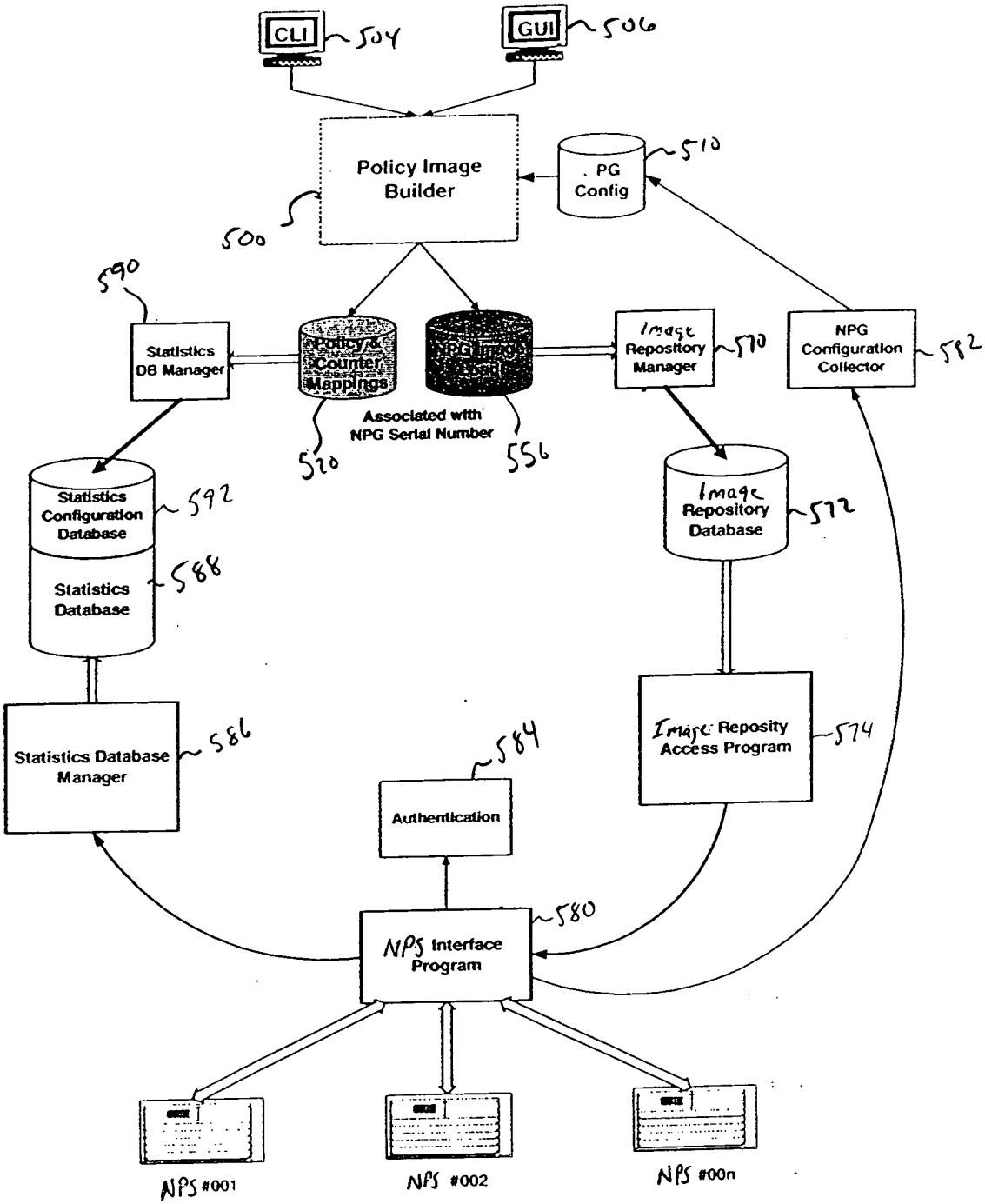
CLI
504
GUI
506
Policy Image Builder
500
PG Config
510
590
Statistics DB Manager
Policy & Counter Mappings
520
NPG Image Record
Associated with NPG Serial Number
556
Image Repository Manager
570
NPG Configuration Collector
582
Statistics Configuration Database
592
Statistics Database
588
Image Repository Database
572
Statistics Database Manager
586
Image Reposity Access Program
574
584
Authentication
580
NPS Interface Program
NPS #001
NPS #002
NPS #00n

FIG. 7